

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S4	6	("4,759,056") or ("4,961,217") or ("5,153,906") or ("5,440,625") or ("5,524,049") or ("6,075,983")). PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/07/16 08:55
S5	191	("3588365" "4045619" "4187498" "4355207" "4439636" "4473720" "4518824" "4535204" "4595983" "4625276" "4677657" "4680785" "4759056" "4817136" "4961217" "4998291" "5335278" "5414753" "5428666" "5437053"). PN. OR ("4759056" "4961217" "5153906" "5440625" "5524049" "6075983"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 08:20
S6	50	("5550984" "5623605" "5671226" "5734835" "5764741" "5768633" "5790548" "5809251" "5809512" "5813006" "5819273" "5822216" "5832223" "5845290" "5869819" "5892536" "5892825" "5901228" "5918010" "5931906" "5936547" "5944790" "5945988" "5950173" "5951642" "5957695" "5974461" "5987612" "5996000" "5996006" "5999741" "6005597" "6007426" "6008802" "6009526" "6009528" "6018801" "6023698" "6032162" "6037932" "6038233" "6038602" "6038610" "6044372" "6049796" "6064979" "6069890" "6073015" "6076072" "6081789").pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 08:55

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S7	47	("5732218" "5898836" "5974250" "6061790" "6061790" "6098056" "6195693" "6219818" "6219818" "5671226" "5734835" "5764910" "5884056" "5903889" "5907837" "5949491" "5951642" "6003030" "6044372" "6065012" "6081842" "6094435" "6125352" "6128624" "6141010" "6151591" "6151601" "6154744" "6179209" "6185574" "6219671" "6219671" "5400335" "5491820" "5548729" "5559958" "5574849" "5610745" "5611047" "5617565" "5629980" "5638443" "5651064" "5668999" "5675579" "5677953" "5708655" "5713019" "5715823" "5719937").pn.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 08:55
S8	93	S6 S7	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 08:56
S9	1	("20040049556").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/07/16 08:56
S10	281	PDA near (attach\$3 connect\$4)near (computer cpu device)	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 09:58
S11	1	(US-20040049556-\$).did.	US-PGPUB	OR	ON	2007/07/16 10:17
S12	1	S11 and display	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 10:17
S13	15	("4126768" "4130738" "4759056" "4768218" "4817135" "4839919" "4882750" "5073932"). PN. OR ("5557662").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 10:36
S14	12	("4113991" "4625276" "4821107" "4833705" "4900902" "4961217" "5099512" "5283820"). PN. OR ("5487106").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 11:50

EAST Search History

S15	1	(US-4625276-\$).did.	USPAT	OR	ON	2007/07/16 13:20
S16	0	S15 and "fig. 4"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 13:20
S17	1	S15 and "4"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 13:21
S18	0	S15 and "FIG. 4"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 13:36
S19	12	("4113991" "4625276" "4821107" "4833705" "4900902" "4961217" "5099512" "5283820").PN. OR ("5487106").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 13:48
S20	1	(US-5384834-\$).did.	USPAT	OR	ON	2007/07/16 14:00
S21	0	S15 and "1608"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 14:01
S22	0	S15 and "beep"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 14:01
S23	1	S20 and "1608"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 14:01
S24	1	("20040049556").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2007/07/16 14:55
S25	1	S24 and setting	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 15:23

EAST Search History

S26	1	S24 and "207"	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 15:29
S27	1	S24 and program	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 16:06
S28	1	S24 and connection	US-PGPUB; USPAT; USOCR	OR	ON	2007/07/16 16:06

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1. This document has been translated by computer. So the translation may not reflect the original precisely.
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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] Especially this invention relates to the information communication link card system which communicates by choosing the optimal communication link root automatically with a card (information communication link card) about the communication mode of an telecommunications system.

[0002]

[Description of the Prior Art] In the conventional correspondence procedure, since there were too many parameters (a communication network, telex rate accounting system, etc.) which a user has to judge by the difference in types of services, a communication medium, etc., the optimal selection of communication service is complicated, is difficult, and might fully be unable to use service. Moreover, whenever it communicated, the case which dials a service code for a user to connect with a communication network himself, and communicates was almost the case.

[0003] Although the function which chooses the communication network of a low tariff automatically and carries out call origination most on the other hand among the communication networks which can be used was also used, there was a limit of being restricted to the communication network which operability changed with communication terminals since it was the function which communication terminal each has, and also made a contract of the communication network which can be used for every communication terminal.

[0004]

[Problem(s) to be Solved by the Invention] While various information communication networks are fixed with progress of an information society in recent years, diversification of a telecommunications service is progressing. For this reason, each information communication network and the telex rate accounting system of a telecommunications service are also diversified, it is complicated, and the situation that it cannot judge easily whether a user is the most efficient if which communication service is used to a means to communicate, and the most economical if which communication network is used has occurred.

[0005] Moreover, when communicating, it will be decided by dial actuation at the time of communication link initiation which communication network will be chosen, but since terminal-handling nature changed with differences between the communication network to diversify, complicated communication service, and a communication medium etc., dial actuation became complicated, and it could not be operated easily, but there was a fault that communication service might be unable to be used well.

[0006] The object of this invention is by using the information communication link card which chooses the optimal communication network for directions of a user automatically, and can communicate to offer the efficient communication mode which can communicate without being conscious of the information communication network and communication service to diversify.

[0007]

[Means for Solving the Problem] Drawing 1 is the principle explanatory view of this invention. The information communication link card which 100 are constituted by the information processor among drawing and 200 consists of with an IC card etc., the communication network of various kinds [300 / 400 / an information communication link processor and], and 500 express the information centre which offers a telecommunications service.

[0008] The user communication service property information storage and the management tool 210 which the information communication link card 200 accumulates the user communication service property information about the information on the available communication service of the user who owns a card, and is managed, A communication network 400 Or the communication service property information about the property information on the service which information centre 500 grade offers, And output and input the user demand service characteristic information about the property information on communication service which a user demands, and it carries out based on those information and the user communication service property information which user communication service property information storage and a management tool 210 manage. The communication network which a user needs, communication service, or its both sides is chosen, and it has a communication network / communication service selection / advice means 220 to notify to the information communication link processor 300.

[0009] An information processor 100 has an advice means 110 of user demand service characteristic information to input the user demand service characteristic information which a user needs, and to notify to the information communication link card 200.

[0010] The information communication link processor 300 has an advice means 310 of communication service property information to notify communication service property information to the information communication link card 200, and the communications control means 320 which inputs the information about the communication network/communication service which the information communication link card 200 chose, and communicates by performing dialing operation with them.

[0011] The function of the advice means 110 of user demand service characteristic information which the above-mentioned information processor 100 has may be prepared as an advice means 330 of user demand service characteristic information in the information communication link processor 300.

[0012]

[Function] In this invention, the optimal communication network/communication service for directions of a user are automatically chosen from the communication service property information about available communication network/communication service by using the information communication link card 200 with portability with the user communication service property information which is the individual humanity news of the user in the information communication link card 200, the user demand service characteristic information which is communication link demand input, and the information communication link processor 300 read in the information communication link processor 300. In the installation or the movable information communication terminal of the information communication link processor (terminal) 200, it does not call at the utilization location, but the information communication link card 200 is only connected to the information communication link processor 300, and it can communicate automatically, without being conscious of the communication service and the complicated tariff structure to diversify.

[0013]

[Example] The example of this invention is explained with reference to a drawing.

The [1st example] Drawing 2 is the block block diagram of the 1st example of this invention, and drawing 3 is the signal sequence diagram of the 1st example of this invention.

[0014] In this example, the information processor 100 shown in drawing 1 corresponds to Personal Digital Assistant 1 of drawing 2 , and the advice means 110 of user demand service characteristic information is realized by the Lord of Personal Digital Assistant 1 by the card connection control section 11, the communication link information-control section 12, and the information input section 14. Moreover, the information communication link card 200 shown in drawing 1 is equivalent to the information communication link card 2 of drawing 2 , and user agreement service information storage

and the Management Department 25 deserve user communication service property information storage and a management tool 210. Communication network / communication service selection / advice means 220 is mainly realized by a personal digital assistant / communication terminal connection control section 21, the service utilization information creation section 23, and the communication link information decision section 24. The information communication link processor 300 shown in drawing 1 corresponds to the information communication terminal 3 of drawing 2 , and the advice means 310 of communication service property information is mainly realized by communication service property information storage and the Management Department 33, the are recording information reading control section 36, and the card connection control section 35. Moreover, the communications control means 320 supports the communication link directions section 32, and a circuit and the communications control section 31.

[0015] In order to realize service of an telecommunications system, beforehand to the communication service property information storage and the Management Department 33 in the information communication terminal 3 as communication service property information

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